Fever various

1825

#
1

An
Inaugural Dissertation
Pased
On
Yellow Fever
As it appeared in Savannah in 1822

By

Paul Hamilton Wilkins

Of

Georgia

Essay

The disease termed by Nosologists Typhus Icterodes or Yellow fever, an Endemic of a Tropical climate, had for some years been remarked for its regular occurrence in Savannah; but did not assume its peculiar frightful appearance and fatality until the summer of 1820: when by its utmost virulence it excited the greatest interest among the Physicians, and offered ample scope for the exercise of speculation & precept. This, like all other diseases, is modified by climate, mode of life, & that infinite variety of causes which influence the animal economy, and has therefore created a fluctuation of opinion and practice coincident with its various changes, from which circumstance no unity of view is adopted, and no determinate data prescribed for our practice. Governed therefore by a variety of opinions, & systems founded upon them, the Physicians of Savannah have adopted plans of practice, as diametrically opposite, as the conclusions which they drew from different premises. Placed by my

esteemed friend and tutor Doctr A. C. Daniell, in the Hospital of that city in the year 1822, I had an opportunity of observing the course of the fever, of becoming acquainted with the different views and plans of treatment of each of the attending Physicians, and the few cursory remarks which I shall make are the results of my observation on the comparative success attending them.

With regard to its cause the greater part of the Medical world has come to the same conclusion. Originating in situations exposed to the exhalations of putrified vegetable matter, & affecting the system as other miasmatic diseases do, they have been compelled to discard the pernicious, somewhat antiquated opinion of contagion. We however find some who obstinately adhere to, and attempt to promulgate that doctrine, against whom argument upon argument has been adduced, facts sufficient to carry conviction to the greatest dogmatist upon earth, still they withhold their assent, we are induced to believe that they are ashamed to renounce

an opinion, which they have not ingenuity to maintain with credit to themselves.

A short time after its appearance in Savannah in 1820 Doctr Hosack of New York believing it to be an instance in support of his favourite doctrine unequivocally asserted its importation & consequent contagion, but he was premature as he had not received his intelligence from sources sufficiently authentic to justify him in forming that opinion. Among all observant persons of that city it was notorious that it originated from putrid exhalations. The fire of the preceding winter (1819) had created such devastation, as to render it impossible to rebuild the city for some length of time in consequence of which, the ruins of houses sinks &c offered sufficient reservoirs for the rain which fell during the months of July and August, on these collection of water & matter of various kinds the subsequent elevation of temperature had full effect, and the exhalations in a short time became so copious concentrated, and virulent as to produce the fever in its most aggravated form. Such a

profusion of facts occured during this period as to banish even from the minds of the inhabitants all idea of contagion. Among the great mass the following appear most satisfactory.

1st Parents attending an expiring child, friends assisting their dying companions would repeatedly have the Black vomit cast from the patients mouths, over their clothes into their faces, still they suffered no injurious consequences.

2nd It was remarked, that the French residents who emigrated from the West India Islands, and their descendants (natives of the city) escaped with impunity the ravages of the disease. To their being climatised and their temperate mode of life, is to be attributed their exemption from the fever. 3rd Writers on the subject of contagion, have remarked that its influence is not felt beyond a few feet. Still we find that during this time several instances occured where people from the country were attacked with, and died of this disease, who were known to

[illegible] the [illegible], without [illegible] them-selves to the [illegible] conclusion.

+ [illegible] from [illegible] upon the [illegible] does [illegible] on the [illegible] strongly [illegible] in the country [illegible] trace of contagion in [illegible] with than any other within the recollection [illegible] recurrence in the [illegible] can be [illegible] traced to [illegible], [illegible] diminution [illegible] circumstance [illegible]? [illegible] in [illegible] active and [illegible] the [illegible] of [illegible] in the [illegible] have the attendant

---

+ See note [illegible]

the [illegible] and convenience [illegible] [illegible] to a [illegible] [illegible] the aggregate of mortality will be materially diminished.

The disease, in its most aggravated form, is the [illegible] [illegible] [illegible] continuing into the winter [illegible] [illegible] considerably; yet the [illegible] are the most common. The patient is first seized [illegible] debility and disinclination to [illegible] [illegible] [illegible] [illegible] slight chills [illegible] at first [illegible], which is succeeded by a reaction in the system [illegible] the second stage in the disease. The patient [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the temperature of the [illegible] [illegible] [illegible] frequent [illegible] [illegible] sinking under [illegible] [illegible] [illegible] colour [illegible] a light white [illegible] [illegible] in quantity [illegible] thick [illegible] [illegible] part [illegible] under-

[illegible] there is intense heat [illegible] of great anxiety. This continues for a day and night when the [illegible] has become [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the [illegible] [illegible] in the [illegible] covered with [illegible] [illegible], but [illegible] continuous [illegible] [illegible] [illegible] in the [illegible] [illegible]; it will in a short time terminate [illegible]. The patient becomes [illegible] and insensible, so that it is impossible to arouse him for any length of time, there is a con[illegible] of the [illegible] great [illegible] [illegible] from the [illegible] [illegible], [illegible] tremors [illegible] death terminates the scene. —

Post mortem examinations made by Dr. Duncan and others, revealed a stomach, bowels, liver, spleen. On opening it we found there a fluid of a dark brown almost black colour, in a lots more or less numerous as to be found on the mucous coat and especially in the cardiac and pyloric portions of the stomach and the villous membranes, the same as found to the latter were found here, and the arteries on the outside of these two coats were attached together between the coats and the serous, it is certain that such are not distinct, though frequently they are so closely to be so that on opening the stomach they appear as one continued red colour. The sheets are about the size of the foot, joined in a wrinkled and irregular manner, sometimes they exhibit the appearances of the minute extremities of the veins injected with red matter, or lots, but we with these lots are frequently to be perceived black, hard, round, dark, large, in a common case, fine, well marked

with the intestine and are so intimately imbedded in it. On separating the villous from the muscular coat, the red spots are still to be seen on the former and no traces [illegible] on the latter. [illegible] which I received from Dr. [illegible] the last [illegible] he says "I have examined the coats since the commencement of the disease in all the cases I have found the mucous coat of the stomach and duodenum covered with red spots, and the gall bladder distended with bile variously altered from its natural state, sometimes like tar in colour and consistence, in others like coffee grounds, and in one instance staining the [illegible] yellow. In two cases treated with Calomel [illegible] of these spots were found extended throughout the intestinal canal, and were also found in the [illegible] the [illegible] bloody urine, the [illegible] in the [illegible] increase [illegible] in the [illegible] In one case the red spots were

combined the stomach and the intestines had their mucous membranes covered with patches of a thick however minute inflection and a shade of red. The liver & other viscera were healthy in all except one, which from commencing cirrhosis to the last stages. In every case it could trace with clear the inflammation to the tumor, but in none the red patches of the mucous membrane.

In the state of the stomach the disease, diminution of appetite was one of uneasiness, the greater part was an unwillingness to authority, adopt to the favorite view of the day of inflammation. But on an accurate analysis of the symptoms, we attend it seems to us, some little to have in the premonitory, which have been substantiated by subsequent experience. In order for us to arrive at a just conclusion, it is view the com

more effective medicinals on the system, somehow
modified by that peculiar state of self and
the results of Dr Porter's experimentations, and
with immediate reference to that most obvious fact
that the whole labour under a state of
excitement, and cannot without injury perform
the functions that devolve upon them
under the circumstances, and that the action
of the organs under such a state of blood
does not produce a healthy secretion
or healthy secretion & therefore
and the exhibition of the medicines
at this moment, the last have done
no good but an injurious effect, they
are all powerful organs & the same language in
general is the same cause but in respect of
specific action & the power of action or their
influence at a time when they are employed. He therefore

some time the tongue was affected the stimulus in infants, in Scotland an instance, it was also the obstacle from intermittent fever we find the capillaries some little in active the circulation, and the nervous system affected thereby, with the same result as the case which I am treating. Examine the membrane as the cause, let us view the cut. I find that it rest in region of the system; from the small intermittent it has not yet gone into form of disease, so long quiet relative, and produce a tranquil in a manner to which the hypertrophied ventricle, from its lower action, and supposing that a pouch from the aneurism, which had notice in the disease. All the sense of indicate this. What causes the state of languor and debility which usher in the disease? What causes the sluggish, mild and inactive in the capillaries, the consequent

sold-coloured skin in health is remarkable? What cause the intermittent delirium in the close of the disease? What cause that particular state of the mucous coat and that morbid secretion which? It answers to the so plain a concentrated, [illegible] inflammation involving the mucous membrane, [illegible] hypermiasthenic effect the system, [illegible] the disease.

In the remedial [illegible] of [illegible], or some [illegible] cause, [illegible] the [illegible] the system, [illegible] action, but [illegible] in [illegible] truth, only [illegible] [illegible] in the action — [illegible] in a [illegible] the attendant [illegible] the [illegible] and [illegible] [illegible] become [illegible] for [illegible] that state of [illegible] [illegible] to which I have [illegible], which [illegible] to the [illegible] of the animal economy [illegible], in those cases where the cause [illegible], in the greatest degree, of [illegible] of [illegible] is

Therefore, I need in the circulation the system
into under-ten. Sir, the whole train of symp-
toms ceased.

It is now just the truth of this view of them
is, not and legitimate criterion of disease, it
then stands or falls by the result.

A treatment of this disease has caused the
opinions of medical to be very much curious. The
[illegible] treatment, as the disease has been
[illegible] at the end of the inflammatory disease
in consequence, in the case of the
[illegible] have been, [illegible] measures, but
I need [illegible] then the practice then
[illegible] in [illegible] of [illegible] in
[illegible] the system, the
[illegible] but in some instances
[illegible] measure the patient [illegible]
[illegible] the [illegible] of practice for if the disease
[illegible] in the [illegible] state the patient [illegible]

short time suffered much great, restriction, with
relief & in fact to recover. The absurdity
of the practice to me it seems as hard to be
with a comment. Let a simple question suf-
fice. Shall we to remove a clot from a vessel
relieve the obstruction & restore circula-
tion remove the cause of little disease
in the venous circulation? The an-
swer is plain, but practice from that small
number to which, indeed, restrictions of the too
have led. With respect to injections
I believe the same objections exist. Can a de-
pendent column of fluid in the stomach, their
is always obstruction counteract the effect, in
view the instruction. It is since not at the com-
mencement. The usual but when the system
of pure tares on them, they become valuable
even indispensable auxiliaries. In this gene
ral view of remedies, the physicians pres

it by recent the increase of his views, and so to a directly contrary plan of practice. He resorted to stimulants, but here again failure was inevitable. He therefore tried things as a learner rather than as a minister, though he claims the assistance in their use has given to a deserved reputation in disease as a physician of character, not from dissipation & the use of intoxicating illtimes & produced none of those baneful effects which daily attended the last contest, in every case in the slave states of this city. The separations of the carnal & immoral with the well & holy mixture & heaven assimilar fates.

From that have elected to all these modes of practice the question will properly be put, what plan will you adopt? I answer that such it shall be my duty, not to do. In the course of human life, we find that

that "the epithelial covering of the intestinal parts of the body, a certain connection or relation, called in medical language a continuous surface, takes place on their exterior, from the mouth inclusive, to the other extremity of the body, or to the anus inclusive." These and other similar remarks are familiarly known to all students of medicine, and the internal surface of the digestive canal, thus made, seems to be more valuable than many others since the latter appears to be a continuation of the former with the exception of the cuticle, but we do not see in this topic state, or rather in connection with nature, from the views which we have taken the inferences which, perhaps, it may seem certain

[illegible]

[illegible]

[illegible]

et même corrosive, pour la réunion d'où il
en résulte nécessairement la séparation du sérum.
3° Il est bien évident que les vaisseaux se rouvrent
ici, lorsque la cause spéciale inflammatoire aura
cessé, et que le sang, ou plutôt la lymphe
au, peut circuler.
4° L'épanchement de cette sérosité dans une cavité
close ne peut avoir lieu que lorsque l'intérieur
vient à se coller par l'action de la lymphe
qui, produite à l'extérieur par l'irritation, aura
pu, grâce à son caractère coagulable.
5° Il faut que la surface de la cavité
soit recouverte de vaisseaux capillaires
pour que le nouveau tissu qui doit
maintenir coûte que coûte l'intégrité
6° Il faut enfin que la cavité soit étroite.
7° L'inflammation, après avoir été suspendue
par le repos, peut reprendre, lorsque le
sang artériel et veineux circule, revenir

[illegible] a more tender surface, and produces [illegible] results on [illegible] &c.

4th The retained surface is not relieved by this [illegible], [illegible] the receive free circulation [illegible]

5th Inspiration will act a less from the [illegible] [illegible] the [illegible] have no influence.

6th [illegible] [illegible], they are not to leave [illegible] [illegible] they can [illegible] [illegible]

7th [illegible] [illegible], because [illegible], and consequently [illegible].

8th [illegible] the [illegible] of the blood, [illegible] [illegible], and by [illegible] [illegible].

9th [illegible] the [illegible] of internal [illegible] [illegible] [illegible] [illegible] the bowels [illegible] [illegible] [illegible] [illegible], produced by [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

13th [illegible] [illegible] [illegible] [illegible] [illegible] the [illegible] the intermittent or remittent character of the [illegible]

[illegible] and [illegible] continued or constantly [illegible] which gradually [illegible], and in a [illegible] at [illegible] the vascular action resumes its [illegible], without being able to fix the precise [illegible] of such termination and the [illegible] only modify in the [illegible] [illegible] or [illegible] medicines can be said to [illegible] magic effect in the [illegible] [illegible] it is the [illegible] [illegible] [illegible]. In one case which [illegible] [illegible] [illegible] completely insensible, but [illegible] [illegible] to act, vascular action increased, and [illegible] [illegible] [illegible] in the instance where [illegible] were [illegible] [illegible], they have been [illegible] by the remedy, after a time to give [illegible] a recovery, but the disease [illegible] for a [illegible] and [illegible] the [illegible] [illegible] in a [illegible] [illegible] be continued on the [illegible] [illegible] extremities and [illegible] [illegible] with the

disease is inflamed, & then we will find that the
have corrected the exacerbation, gave a tendency
to the patient, and prepared him for the subse-
quent, which of the form, they say, to re-
lieve the distressing & uncomfortable, but
in the long run, the repetition of the tartars be-
come invaluable, and should be administered ac-
cordingly to the circumstances of the patient, here
we shall be admonished to be, in the following

Tinctura Hydrargyri gtt. V.

Sulphuris Aurati. Antimonii gr. ij

mixed & divided in Pulvis No IV. Give one every
four and one hour after the last, provided
Calomel Scruple ij. or Sulphuras Hydrargyrici
Scruple ij. The indications to be fulfilled by this, the
positions are clear, the mercurial impression of the
rates on the bowels, and the antimonials in sara
tion assist in accomplishing our principal
objects, determination to the skin, and equali

zation of vascular action. It sometimes happens that by the [illegible] [illegible] action of this medicine the previous excitement is counteracted, and the inflammatory symptoms removed [illegible] application of the [illegible] [illegible] [illegible] necessary, that the united [illegible] [illegible] [illegible] [illegible] [illegible] Ammonia [illegible] [illegible] infusion [illegible] [illegible] [illegible] [illegible] [illegible] in the [illegible] [illegible] [illegible]

[illegible] [illegible] ℥i

[illegible] [illegible] [illegible]

[illegible] Colchici. [illegible]

[illegible] it [illegible] [illegible] [illegible] [illegible] some [illegible] [illegible] [illegible] [illegible], yet if any action is [illegible] [illegible] since it is [illegible] that it exerts the [illegible] [illegible] [illegible] its actions are [illegible] [illegible] that can be resorted to in this state. Frequently it was given in combination with [illegible] [illegible] [illegible] and [illegible] to [illegible] [illegible]

[illegible] simple but efficacious remedy has stood the test of several years, and increasing popularity and success are the rewards of its author. Disposed as it must be it will be the [illegible] it will [illegible] the disease [illegible] to ameliorate [illegible] the natural, and consequently the influence [illegible] penal code, [illegible] the [illegible] allow it obtains [illegible] and the [illegible] laws to the [illegible] citizen.

[illegible] a [illegible] extract from the report of the [illegible] committee on the [illegible] the [illegible] on [illegible] in the [illegible] may not be [illegible] are [illegible] the [illegible] [illegible] [illegible] the [illegible]

[illegible]

the cultivation of Rice has within the last three years been thrown more immediately under the influence of a wet culture by the opening of an extensive Rice field immediately to its South West. The appearance of the inhabitants is much changed. Formerly a stranger was impressed with the melancholy character of our climate by the blanched faces of our inhabitants. of late the remark is general that their faces are quite as indicative of health as those of persons residing in cities to the North. Besides these evidences your committee refer you to the bills of mortality. It will appear that the proportion of persons dying of autumnal disease, to the population for several years past previous to since the adoption of this system is as follows.

Wet Culture			Dry Culture		
In 1815	one	in 15	In 1818	one	in 62 3/4
1816	do	do 18	1819	do	do 13
1817	do	do 9 3/4	1820	do	do 5 1/10
			1821	do	do 37

Dry culture

In 1822 one in 33-4/5

1823 do do 32 1/2

The estimate of deaths previous to the introduction of this system for a number of years was about one in fourteen. In 1819 there was a remarkable addition of a labouring class of whites to our population from exposure intemperance &c a number of these fell victims to our climate swelled the bills of mortality. In 1820 the yellow fever raged to a great extent. The last three years of the term there was about one death to every 34 which compared to the last three years that elapsed previous to the introduction of the dry culture system is incontestible evidence of the advantage of that system

Wallace